

Project Title: Education Assignment Dashboard

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Category: Web Application

PURPOSE

The purpose of developing this “Education Assignment Dashboard” is to ease the process of allocating, submitting, tracking, and evaluating the assignments which form an essential part of the coursework.

SCOPE

It will create a one on one platform between the professors and their students to solve all the issues related to assignments. The Dashboard will contain the various details of importance related to all the assignments which the professor may wish to give to the students. Apart from posting the question and recording the solution, the dashboard would also enable the professors to evaluate the answers of the students as well as allot the marks. Students would also be able to analyze their evaluated solutions and this will fetch them ample time to work on their weaknesses. It will integrate well with a result portal that will fetch the marks of the assignments and compute it in the overall score obtained by the students in any course. This will provide more flexibility in the existing learning platform structures and will also become an essential feature in the modern world aiming to adopt modern methods of learning.

INTRODUCTION

Introduction contain the following sub categories

Existing System

The present system concerned with handling assignments in our college is Piazza, which is a learning management system which enables students to post their queries in a forum type form. It enables the students to accumulate virtually to ask questions directly to their instructors. For the professors, Piazza comes up with the features of posting slides,resources and assignments online. The provision of students submitting their assignments online is also available in Piazza. Then the question arises that if such a system already exists, why are we planning on making an Education Assignment Dashboard?

We planned upon making an Assignment Dashboard because there are certain incompetencies Piazza due to which it has been unable to provide a complete solution to the problem of online assignment submissions in our college and henceforth we mostly have to mail our assignments

to our professors and it becomes a burdensome task for them to evaluate our assignments.

Also a point to be noted is that most of the dashboards are paid so having a private dashboard would be economical.

The existing system has the following disadvantages

- ✓ It's a third party system and we wish to develop an indigenous system for our institute.
- ✓ It cannot be integrated to any other platform built by the institute for sharing of information.
- ✓ The current format of the evaluation of the assignments is not transparent enough .
- ✓ The system is rigid as in order to submit new assignments a group of all the students must be formed beforehand.
- ✓ One on one interaction between the students and the professor is a bit difficult.
- ✓ Few vital information related to assignment submission can go unnoticed because of unfamiliar UI .
- ✓ Anonymity of the user can lead to forgery and spamming of the inbox.
- ✓ The process of letting the students know about their performance breaches the secrecy of marks as students get to know about everyone else's performance as well.

Proposed System

The assignment dashboard system aims to give the student transparency in marks for their assignment and also keep them aware of deadlines. For professors it removes hectic workload to manually maintain the records of each and every student. The system after careful analysis has been identified to be presented with the following modules:

- **Student Registration:** Admin can register a student for a specific program.
- **Professor Registration:** Admin can register a professor for a specific course.
- **Assignment:** Professor can post assignments with deadlines attached.
- **One to One interaction:** Students can directly interact with professors about doubts related to assignments.

- **Authentication:** Authentication of this application will be provided for only registered members.
- **Submissions:** Students can submit assignments before the deadline.
- **Administration Access:** Administration would be able to keep an eye on the performance of the students
- **Evaluation:** Professors can evaluate the assignments and provide marks along with feedback if necessary.
- **Marks:** Students can get the marks for their assignment and analyse their performance.

Advantages for Students

Advantages for the students are explained below:

- **Transparency in marks:** For students they would know marks obtained and they could see their mistakes and scope for improvement.
- **Integrated environment for assignments:** All the information related to each and every assignment will be present on the dashboard. There won't be any need to switch to multiple platforms in order to view, submit, or analyse the assignments.
- **Privacy:** Students will get to know only their marks safeguarding their privacy.
- **Clarity:** Students can clear all their doubts when attempting assignments.

Advantages for Faculty

Advantages for the professors are explained below:

- **Minimising time wastage :** There would be no need for the professors to communicate via emails for any matter relating to assignments.
- **Efficient evaluation:** There would be no need to go through bulk mails of over a hundred students in order to retrieve each and every individual response. Hence the work of evaluation would be less tedious.
- **Effective Communication:** Another advantage to the professors is that they have time to respond to student doubts and can one to one clear them so that students can have a clear understanding of topics.

FUNCTIONAL REQUIREMENTS

Functional requirements of our system are explained below.

- Each student will be allotted an individual profile having unique user id and a password.
- Admin can add courses for the students which they are going to study in the upcoming semester.
- Faculty would be able to upload and attach deadlines to assignments.
- An Assignment tracker would keep the students updated about all the pending assignments.
- Students can upload their assignments and only the concerned professors would be able to have a look at it.
- The professors will be able to evaluate the assignments.
- After evaluation the marks would be allotted and stored in the dashboard itself.
- Students would be able to analyze their marks directly on the dashboard.
- Faculties can also post their recommendations and comments.
- Students can also send any recommendations or comments to their faculties.

NON FUNCTIONAL REQUIREMENTS

Requirements that specify criteria that can be used to judge the operation of a system are called non-functional requirements. Non-functional requirements of our system are mentioned below:

- Secure access of confidential data (user's details).
- Better component design to get efficiency.
- The architecture would be flexible enough to extend or modify the features if required to do so in the future.

SOFTWARE TOOLS

Database: MongoDB

Frontend: React.js

Backend: Node.js

DEPLOYMENT

Operating System Server: Windows 10, Linux, UNIX

HARDWARE SPECIFICATION (min req)

Processor: Intel Core i3

RAM: 2GB

Hard Disk: 200 GB